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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/820,009

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Hyung Sun Kim

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CHIO, TAT CHI

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/820,009	Applicant(s) KIM ET AL.	
	Examiner TAT CHI CHIO	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/11/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 1/7/2008 have been fully considered but they are not persuasive.

Applicant argues that Bae et al. do not teach that the local style information providing font information for at least a portion of the text subtitle data following sequentially after the local style information.

In response, the examiner respectfully disagrees. The structure of the subtitle information shown in Fig. 6 of Bae et al. clearly illustrates that the text subtitle data is following sequentially after the local style information (font information). Therefore, Bae et al. teach the local style information providing font information for at least a portion of the text subtitle data following sequentially after the local style information.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-6, 8-11, and 16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Nonfunctional descriptive material that does not constitute a statutory process, machine, manufacture, or composition of matter and should be rejected under 35 U.S.C. 101. Certain types of descriptive material, such as music, literature, art, photographs, and mere arrangements or compilations of facts or data, without any functional interrelationship is not a process, machine,

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manufacture, or composition of matter. USPTO personnel should be prudent in applying the foregoing guidance. Nonfunctional descriptive material may be claimed in combination with other functional descriptive multi-media material on a computer-readable medium to provide the necessary functional and structural interrelationship to satisfy the requirements of 35 U.S.C. 101. The presence of the claimed nonfunctional descriptive material is not necessarily determinative of nonstatutory subject matter. For example, a computer that recognizes a particular grouping or sequence of musical notes read from memory and thereafter causes another defined series of notes to be played, requires a functional interrelationship among that data and the computing processes performed when utilizing that data. As such, a claim to that computer is statutory subject matter because it implements a statutory process.

Claims 1-6, 8-11, and 16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 5 and 10 recite a computer-readable medium which does not impart functionality to a computer or computing device, and is thus considered nonfunctional descriptive material. Such nonfunctional descriptive material, in the absence of a functional interrelationship with a computer, does not constitute a statutory process, machine, manufacture or composition of matter and is thus non-statutory per se.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 5, 6, 8, 9, 13, 16, 21, and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Bae et al. (US 2003/0188312 A1).

Consider claim 1, Bae et al. teach a computer-readable medium having a data structure for managing reproduction of a text subtitle data, comprising: a data area storing a text subtitle stream including text subtitle data and local style information (Fig. 6), the local style information providing at least one font information for at least a portion of the text subtitle data following sequentially after the local style information. (Fig. 6).

Consider claim 5, Bae et al. teach the computer-readable medium, wherein the rendering information includes a display effect of the text subtitle data ("font color" of Fig. 6).

Consider claim 6, Bae et al. teach the computer-readable medium, wherein the font information includes at least one of a font, font size and a font style (Fig. 6).

Consider claim 8, Bae et al. teach the computer-readable medium, wherein the text subtitle data includes at least one text string (it is well-known in the art that subtitle data includes at least one text string).

Consider claim 9, Bae et al. teach the computer-readable medium, wherein the local style information is stored in association with the portion of the text subtitle data for which the local style information provides the font information (Fig. 6).

Consider claim 13, Bae et al. teach method of reproducing a data structure for managing reproduction of a text subtitle data, comprising: reproducing a text subtitle stream from the recording medium (Fig. 5), the text subtitle stream including text subtitle data and local style information (Fig. 6), the local style information providing at least one font information for at least a portion of the text subtitle data following sequentially after local style information (Fig. 6).

Consider claim 16, Bae et al. teach the computer-readable medium, wherein the text subtitle stream further includes global style information providing at least one of composition information and rendering information (Fig. 6).

Consider claim 21, Bae et al. teach the method, wherein the text subtitle stream further includes global style information providing at least one of composition information and rendering information (Fig. 6).

Consider claim 24, Bae et al. teach the method, wherein the local style information is stored in association with the portion of the text subtitle data for which the local style information provides the font information (Fig. 6).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-4, 12, 14, 15, 17-20, 22, 23, and 25-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bae et al. (US 2003/0188312 A1) in view of Tsukagoshi et al. (5,848,217).

Consider claim 2, Bae et al. teach all the limitations in claims 1 and 16 but fail to teach the computer-readable medium, wherein the composition information includes

position information for positioning a text subtitle represented by the text subtitle data on a display.

Tsukagoshi et al. teach the computer-readable medium, wherein the composition information includes position information for positioning a text subtitle represented by the text subtitle data on a display (col. 5, lines 56-58). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the composition information in the subtitle data in order to give a more accurate description of the subtitle data.

Consider claim 3, Bae et al. teach the computer-readable medium, wherein the rendering information includes a display effect of the text subtitle data ("font color" of Fig. 6).

Consider claim 4, Tsukagoshi et al. further teach the computer-readable medium, wherein the global style information includes the composition information and the rendering information (col. 5, lines 56-67).

Consider claim 12, Bae et al. and Tsukagoshi teach a method of recording a data structure for managing reproduction of a text subtitle data, comprising: recording a text subtitle stream on the recording medium (col. 13, lines 45-55 of Tsukagoshi et al.), the text subtitle stream including text subtitle data and local style information (Fig. 6 of Bae et al.), the local style information providing at least one font information for at least a portion of the text subtitle data following sequentially after the local style information. (Fig. 6 of Bae et al.).

Consider claim 14, Bae et al. and Tsukagoshi et al. teach an apparatus for recording a data structure for managing reproduction of a text subtitle data, comprising: an optical recording device configured to record data on the recording medium (Fig. 9 of Tsukagoshi et al.); a controller configured to control the optical recording device to record a text subtitle stream on the recording medium (14 of Fig. 1 of Tsukagoshi et al.), the text subtitle stream including text subtitle data and local style information (Fig. 6 of Bae et al.), the local style information providing at least one font information for at least a portion of the text subtitle data following sequentially after the local style information (Fig. 6 of Bae et al.).

Consider claim 15, Bae et al. and Tsukagoshi et al. teach an apparatus for reproducing a data structure for managing reproduction of a text subtitle data, comprising: an optical reproducing device configured to reproduce data recorded on the recording medium (15 of Fig. 1 of Tsukagoshi et al.); a controller configured to control the optical reproduction device to reproduce a text subtitle stream from the recording medium (14 of Fig. 1 of Tsukagoshi et al.), the text subtitle stream including text subtitle data and local style information (Fig. 6 of Bae et al.), the local style information providing font information for at least a portion of the text subtitle data following sequentially after the local style information (Fig. 6 of Bae et al.).

Consider claim 17, Bae et al. teach the method, wherein the text subtitle stream further includes global style information providing at least one of composition information and rendering information (Fig. 6).

Consider claim 18, Tsukagoshi et al. teach the method, wherein the composition information includes position information for positioning a text subtitle represented by the text subtitle data on a display (col. 5, lines 56-58).

Consider claim 19, Bae et al. teach the method, wherein the rendering information includes a display effect of the text subtitle data ("font color" of Fig. 6).

Consider claim 20, Bae et al. teach the method, wherein the local style information is stored in association with the portion of the text subtitle data for which the local style information provides the font information (Fig. 6).

Consider claim 22, Tsukagoshi et al. teach the method, wherein the composition information includes position information for positioning a text subtitle represented by the text subtitle data on a display (col. 5, lines 56-58).

Consider claim 23, Bae et al. teach the method, wherein the rendering information includes a display effect of the text subtitle data ("font color" of Fig. 6).

Consider claim 25, Bae et al. teach the apparatus, wherein the text subtitle stream further includes global style information providing at least one of composition information and rendering information (Fig. 6).

Consider claim 26, Tsukagoshi et al. teach the apparatus, wherein the composition information includes position information for positioning a text subtitle represented by the text subtitle data on a display (col. 5, lines 56-58).

Consider claim 27, Bae et al. teach the apparatus, wherein the rendering information includes a display effect of the text subtitle data ("font color" of Fig. 6).

Consider claim 28, Bae et al. teach the apparatus, wherein the local style information is stored in association with the portion of the text subtitle data for which the local style information provides the font information (Fig. 6).

Consider claim 29, Bae et al. teach the apparatus, wherein the text subtitle stream further includes global style information providing at least one of composition information and rendering information (Fig. 6).

Consider claim 30, Tsukagoshi et al. teach the apparatus, wherein the composition information includes position information for positioning a text subtitle represented by the text subtitle data on a display (col. 5, lines 56-58).

Consider claim 31, Bae et al. teach the apparatus, wherein the rendering information includes a display effect of the text subtitle data ("font color" of Fig. 6).

Consider claim 32, Bae et al. teach the apparatus, wherein the local style information is stored in association with the portion of the text subtitle data for which the local style information provides the font information (Fig. 6).

5. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bae et al. (US 2003/0188312 A1) in view of Kashima (US 2002/0087999 A1).

Consider claim 10, Bae et al. teach all the limitations in claim 1 but fail to teach the computer-readable medium, wherein the text subtitle stream is stored as at least one packetized elementary stream.

Kashima teaches the recording medium, wherein the text subtitle stream is stored as at least one packetized elementary stream (Fig. 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to

store the text subtitle stream as packetized elementary stream to facilitate efficient transmission using MPEG 2.

Consider claim 11, Kashima further teaches the computer-readable medium, wherein the text subtitle stream is stored as a plurality of transport packets ([0024]).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAT CHI CHIO whose telephone number is (571)272-

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9563. The examiner can normally be reached on Monday - Thursday 9:00 AM-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on (571)-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. C. C./
Examiner, Art Unit 2621

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621